

Amendments to the Claims

1. (Currently amended) A method for the assembly of a layer-by-layer thin film comprising the steps of:
 - (a) applying a substrate to a support surface;
 - (b) forming a layer-by-layer thin film upon said substrate by the substeps of:
 - (i) immersing said substrate in a first aqueous solution or dispersion of a first substance, said first substance having an affinity for said substrate;
 - (ii) rinsing said substrate with neat solvent;
 - (iii) immersing said substrate in a second solution or dispersion of a second substance, said second substance having an affinity for said first substance; and
 - (iv) rinsing said substrate with neat solvent;
 - (d) removing said substrate together with said layer-by-layer thin film from said support; and
 - (e) separating said substrate from said layer-by-layer thin film.
2. (Original) The method of claim 1 further including the additional step of:
 - (b)(v) repeating steps (b)(i) through (b)(iv) a predetermined number of times.
3. (Currently amended) The method of claim 2 further comprising for at least ~~on~~ one repetition of step (b)(i), replacing the solution or dispersion of said first substance with a solution or dispersion of a third substance, said third substance having an affinity similar to said first substance.

4. (Original) The method of claim 3 wherein for at least one repetition of step (b)(i), said solution or dispersion of a substance is of a biological compound.
5. (Currently amended) The method of claim 2 further comprising for at least ~~on~~ one repetition of step (b)(iii), replacing the solution or dispersion of said second substance with a solution or dispersion of a third substance, said third substance having an affinity similar to said second substance.
6. (Currently amended) The method of claim 5 wherein for at least one repetition of step ~~(e)~~(b)(iii), said solution or dispersion of a substance is of a biological compound.
7. (Currently amended) The method of claim 2 further comprising substituting for at least one repetition of step ~~(e)~~(b)(i) or ~~(e)~~(b)(iii), a solution or dispersion of a structural stabilizing material.
8. (Withdraw) A thin film constructed according to the method of claim 1.
9. (New) The method of claim 1 wherein said step of separating said substrate from said layer-by-layer thin film comprises:
dissolving said substrate.
10. (New) The method of claim 1 wherein said step of separating said substrate from said layer-by-layer thin film comprises:

chemically treating said substrate.

11. (New) The method of claim 1 wherein said step of separating said substrate from said layer-by-layer thin film comprises:
melting said substrate.